

DEVAL L. PATRICK Governor

TIMOTHY P. MURRAY Lieutenant Governor

COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS DEPARTMENT OF ENVIRONMENTAL PROTECTION NORTHEAST REGIONAL OFFICE

205B Lowell Street, Wilmington, MA 01887 • (978) 694-3200

IAN A. BOWLES Secretary

LAURIE BURT Commissioner

February 11, 2009

Andrew Bisignani Town of Saugus Town Hall 298 Central St. Saugus, MA 01906

RE:

SAUGUS - Solid Waste

Main Street Landfill Certification of Closure

Approval of Post-Closure Monitoring Plan

File # W081968 FMF # 39701

Dear Mr. Andrew Bisignani:

The Massachusetts Department of Environmental Protection, Northeast Regional Office, Bureau of Waste Prevention, Solid Waste Section (MassDEP) has received certification, dated December 26, 2006, by Camp Dresser & McKee Inc., Cambridge, Massachusetts (CDM), of completion of the construction of the cap on the Town of Saugus Main Street Sanitary Landfill, 513 Main Street, Saugus, Massachusetts.

On June 30, 2005 MassDEP approved final closure plans (Corrective Action Design, File # W057759) for capping of the landfill. A modification of those plans (File # W068391) was approved on September 29, 2005. The approved final closure of the landfill included capping of the landfill with a High Density Polyethylene flexible membrane and installing a passive venting system for the controlled release of landfill gases to the atmosphere.

Construction of the cap commenced circa August 2005 and was completed during the spring of 2006.

MassDEP has determined that construction of the cap on the landfill has been completed in accordance with the approved plan. Pursuant to 310 CMR 19.045(4), MassDEP deems the landfill is closed.

CDM has submitted on behalf of the Town a revised Post-Closure Monitoring Plan (received by MassDEP January 25, 2007). The revised monitoring plan amends the former (2005) monitoring plan by deleting sampling of sediments within wetlands abutting the landfill. MassDEP has determined the revised monitoring plan complies with the applicable requirements as established at 310 CMR 19.132, et al. This Certification of Completion of Closure shall, therefore, constitute approval of the revised monitoring plan, subject to condition that:

1. The Monitoring Parameters (Section 1.3) shall include laboratory analysis for 1,4-Dioxane.

2. The monitoring well and surface water sampling location information shall be amended to specify the datum and units of measure for the "Geodetic Location".

Pursuant to 310 CMR 19.045(4), "Facility Closure and Post-Closure", issuance of this Certification of Completion of Closure starts to Post-Closure monitoring and maintenance period as established at 310 CMR 19.142, "Landfill Post-Closure Requirements", et al. The Town shall maintain, care for and monitor the facility for such period as stipulated at 310 CMR 19.142(2) unless approved otherwise by MassDEP. Provided MassDEP may extend the Post-Closure monitoring and maintenance period as authorized at 310 CMR 19.142(4). Pursuant to 310 CMR 19.142(7), "Additional Measures", MassDEP reserves the right to require additional measures be taken, including assessment and corrective action pursuant to 310 CMR 19.150, "Landfill Assessment Requirements", and 19.151, "Corrective Action Requirements".

Sincerely,

John A. Carrigan

Solid Waste Management

Section Chief

If you have any questions regarding this matter please contact David Adams at 617-654-6677.

Sincerely,

David C. Adams Environmental Engineer

Solid Waste Management

JAC/DCA/dca

enclosure: Fact Sheet

cc:

Saugus Board of Health Town Hall Saugus, MA 01906

Daniel Guglielmi Camp Dresser & McKee Inc. One Cambridge Place 50 Hampshire St. Cambridge, MA, 02139

Joseph Attubato, Director of Public Works Town of Saugus Town Hall 298 Central St. Saugus, MA 01906

MassDEP/Boston/attn: Brian Holdridge

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One Cambridge Place, 50 Hampshire Street Cambridge, Massachusetts 02139 tel: 617 452-6000 fax: 617 452-8000

February 19, 2009

Andrew Bisignani Town Manager Saugus Town Hall 298 Central Street Saugus, Massachusetts 01906

Subject:

Main Street Landfill Project

Town of Saugus

Certification of Closure

Dear Mr. Bisignani:

Camp Dresser and McKee, Inc. (CDM) is pleased to announce the receipt of the enclosed Certification of Closure for the Main Street Landfill, which was issued by the Massachusetts Department of Environmental Protection (MADEP) on February 11, 2009. This signifies the completion of the Main Street Landfill Closure Project and its compliance with all MADEP requirements.

The first phase of the project included the receipt and placement of approximately 425,000 cubic yards of Historic Fill material from the Central Artery/Third Harbor Tunnel (CA/T) Project. This material, which was delivered to the site from April 2003 to January 2005, was used to shape the landfill site prior to construction of the final cap. The cap construction, which constituted the second phase of the project, was completed from August 2005 to April 2006. Revenues generated by the receipt of the CA/T materials were used to pay for all engineering and construction costs associated with the entire project and no additional Town appropriations were required. Had the Town opted not to receive the CA/T materials and had paid for the landfill cap with Town funds, the cost would have been over 2.7 million dollars.

The landfill site is now viewed as closed and capped by MADEP and the Town enters into the post-closure period. This requires annual environmental monitoring and maintenance of the site to preserve the integrity of the landfill cap. In accordance with MADEP Solid Waste

Document Code



Andrew Bisignani February 19, 2009 Page 2

Regulation 310 CMR 19.142, this period "shall extend for a minimum of thirty years," unless otherwise approved.

We appreciate the opportunity given to us to work with the Town on this successful project and look forward to future endeavors.

Please feel free to call me at 617-452-6648 with any questions or if you would like to discuss further.

Very truly yours,

Daniel Guglielmi, P.E.

Project Manager

Camp Dresser & McKee Inc.

c: J. Attubato, Saugus

P. Ross, CDM

B. Haskell, CDM

Town of Saugus

Landfill Closure Costs Report

February 3, 2009

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CERTIFIED PUBLIC ACCOUNTANTS MANAGEMENT ADVISORS

10 New England Business Center Drive • Suite 112 Andover, MA 01810-1096 (978) 749-0005 • Fax (978) 749-0006 www.melansonheath.com

February 3, 2009

Mr. Andrew Bisignani Town Manager 298 Central Street Saugus, MA 01906

Dear Mr. Bisignani:

We are pleased to present our report related to services provided for the Town of Saugus Landfill.

We applied the agreed-upon procedures, which are described below. This engagement was solely to assist the Town of Saugus in determining the propriety of Landfill Closure Costs. Our engagement to apply agreed-upon procedures was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of those parties specified in the Agreed-Upon Procedures report.

Revenues

Confirmed revenues received with the Commonwealth of Massachusetts.

 Summarized revenue estimates recorded in Board of Selectmen minutes, and compared to actual revenues received.

Obtained a copy of contract with Commonwealth of Massachusetts and compared

rates/tonnage to sample of actual receipt remittances.

Determined whether records existed to track incoming tonnage and compared to actual receipt remittances.

Expenses

Traced sample of expenses to actual approved invoices.

 Obtained copies of original contracts/change orders and tested compliance with actual engineer/contractor costs.

Tracked changes to Engineer's estimated closure/post closure costs and compared to actual costs.

Because the agreed-upon procedures referred to above do not constitute an examination in accordance with U.S. generally accepted auditing standards, we do not express an opinion on the financial statements of the Town of Saugus.

Saugus February 3, 2009 Page 2

Our engagement cannot be relied upon to disclose errors, irregularities, or illegal acts, including fraud or defalcations, that may exist.

The report and findings are contained in the following pages.

Very truly yours,

Melasa, Heathe Compay, P.C. Melanson, Heath & Company, P.C. October 9, 2007

Background

In accordance with the Revised Guidelines for Determining Closure Activities at Inactive Unlined Landfill Sites dated July 6, 2001 the Town of Saugus was required to enter into an Administrative Consent Order (ACO) with the Commonwealth of Massachusetts, Department of Environmental Protection (DEP).

As part of that ACO the Town was required to submit a cost and revenue projection including expected revenue from the receipt of CA/T fill from the Massachusetts Highway Department. The plan required public participation and approval by the Board of Selectmen.

At a Board of Selectmen's meeting on February 26, 2002 the Town Manager (Steven Angelo), Attorney Michelle O'Brien and Richard Speiler of Camp, Dresser and McKee (CDM) presented closure options to the Board of Selectmen. Two options were presented by Attorney O'Brien.

"1. To cap and close; or 2. bring in soils from the Central Artery Project with post closure use, such as fields, walking trails, etc and to be able to keep the composting program, and said the Town will hold informational sessions before DEP final approval and they must meet all State and local laws".

Mr. Spiedler (CDM) said that "material would be stockpiled, tested and graded and could start as early as July, depending on permitting, and would take 1 to 2 years to bring materials in, with proposed hours of 7 AM to 7 PM, 5 days a week, with potentially longer hours during the winter months, averaging approximately 80 to 100 trucks a day, the route would be Route 1 to Main Street to the site".

Attorney O'Brien indicated that "timing is an issue because the Central Artery materials will run out and they are looking for a home for the material". The Manager said he was "thinking soccer field, walking trail, basketball and tennis courts".

There were various questions raised by Board members including:

"Will the material be DEP approved?"

"What if there is run off/hazardous waste?"

The Selectmen raised concern for the neighbors and concern over run off contaminating the wells. The Town Manager gave assurances that there was a management plan in place to control storm water.

The Chairman asked about materials and was told by Mr. Spielder said they would "only accept historic soil."

The Town Manager indicated that there would be an initial bond of \$2.5 million and that would be reimbursed.

One Selectman asked the Town Manager if he was "absolutely committed to recreational use." He said he thought it was the best use for the land but that he would abide by the wish of the community.

There was discussion regarding dust control and a response was given that all trucks would be covered and wheels washed when leaving both Boston and Saugus.

Attorney O'Brien indicated that the Central Artery was looking for a letter of intent and the Board voted 5-0 to support the plan and authorize them to move forward in negotiations.

In the minutes to the April 16, 2002 Board of Selectmen's meeting there was reference to an informational meeting scheduled for April 30, 2002 but we were unable to locate minutes to that meeting.

At the Annual Town meeting the Town voted to approve the \$2.5 million bond issue.

We reviewed a copy of a letter dated July 12, 2002 signed by the Saugus Landfill Alliance. That letter referred to the April 30, 2002 informational meeting as the only public meeting and expressed concern over misinformation given at the meeting. There was a request for information and issues for which clarification was sought including:

At the April 30, 2002 meeting 425,000 cubic yards was to be brought in and at a June 3, 2002 meeting the amount changed to 450,000 cubic yards.

Alliance members were told that there would be 38 trucks per day and at the June 3rd meeting it was said to be 100 trucks to shorten the time line of traffic.

Residents were told that only clean historic fill would be used but that they were now being told that contaminated fill would be accepted and covered to protect the environment.

There was also confusion as to whether the fill was to come from the Central Artery or from the Subaru Pier.

The alliance asked for a delay in signing the ACO until the issues were addressed.

The Board of Selectmen met with members of the Coalition on July 23, 2002 and cited a presentation at a Thursday meeting held by the Alliance where answers to the coalition's questions would be addressed. We were unable to locate minutes to that meeting. As reported, various members of the Town attended the Alliance meeting. A presentation by Attorney O'Brien was made regarding the Town's proposal to truck in 450,000 cubic yards of contaminated fill to pay for the project.

First step would be execution of the ACO which would commit the Town to a deadline for capping the project with or without the contaminated but DEP approved fill. The ACO would require work to commence within 30 days of signature. The Alliance requested a delay in signing the ACO until a new Town Manager is present.

At the next Board meeting of July 30, 2002 there was reference to the Thursday meeting. The Land Fill Alliance has drafted three questions that they would like answered. Mr. Nigro (DPW Director of Operations) was assigned getting the answers. There was discussion about a timeline in getting the answers and requesting DEP for a 30 or 90 day delay on signing the ACO. The Board voted 4-0 to delay signing the ACO until the questions were answered.

The next recorded information that we have is the Board of Selectmen's meeting of August 26, 2002. At that meeting there were two representatives from the Central Artery Project, two representatives from CDM, Attorney O'Brien and Mr. Nigro, DPW Director of Operations. There was discussion regarding various options in closing the landfill. The following statements were recorded.

There was a minimum of 70,000 cubic yards of fill necessary to cap the landfill.

A cost estimate was provided that \$2.3 million plus \$500,000 for post closure monitoring plus the cost of engineering/design brings the total cost to \$3.5 million no matter which plan is opted for.

The question was asked if the 70,000 cubic yards included post closure use and the answer was no.

It was then asked if 200,000 cubic yards included post closure use and the answer was yes.

It was asked how many trucks would there be daily for the 70,000 cubic yards. The answer was 50.

Questions regarding the type of fill and testing procedures were asked. The CA/T representatives stated that DEP did a test on the materials and concluded that there were some contaminants found. They further stated that they were way below the DEP limit. There was discussion about exposure and CA/T representatives stated that there would be 2-3 feet of material on top so that there would be no exposure. When asked about exposure from material blowing off the trucks, there was assurance that there was no risk of incidental exposure.

There ensued a discussion regarding testing in Boston and at the Saugus site and procedures for removing contaminated materials. Concern was stated by Alliance members and other citizens regarding safety issues as well as the traffic flow issues. There is no record of action taken at that meeting.

At the August 27, 2002 Selectmen's meeting there is note of one open question and request for a more detailed report for the three options. There was no detail provided about the three options.

There is a letter from CDM to the Director of Operations dated September 12, 2002 which provides cost estimates for three options. They include 70,000 cubic yards of fill, 200,000 cubic yards of fill and 450,000 cubic yards of fill. The options were presented based on purchase of the fill and receipt of materials from the CA/T. The option for purchase of 70,000 cubic feet of fill or acceptance of 70,000 cubic feet of materials from CA/t did not include a provision for recreational fields. The other two options included an allowance for recreational fields estimated at \$750,000. The cost estimate is included in our report as Attachment I.

The September 25, 2002 Selectmen's meeting records the fact that there have been several information meetings and a decision needed to be made or the Town would be held to the old ACO. Present at the meeting were the DPW Director of Operations, Attorney O'Brien and a representative from the CA/T project. The Director of Operations gave a packet to the Selectmen making clarifications requested at the last Selectmen's meeting.

The first question raised was on the thickness of the liner. The Director of Operations was to investigate the cost.

The Director of Operations stated that post closure will include two fields, a composting area and a possible walking trail link to Breakheart Reservation. The height would be between 43' and 50' with a gradual slope.

A question was asked if the fill was Ok for the proposed fields and if so how about using the fill for other fields. It was explained that the fill would require a liner and topsoil to be useable.

It was stated that the project was a Town project and would require a full time Clerk of the Works.

There was more discussion about neighborhood exposure and assurances were given regarding covering tucks, washing wheels, dust control and storm water retention.

There was additional discussion about safety issues. There was also additional discussion regarding traffic and road issues.

It was stated that the decision was to either use CA/T materials and fund the remainder of the project or use CA/T materials to fund the full project and convert the landfill to useable property for the community. There were discussions about safety issues verses closing the landfill with little impact on the taxpayers.

A question was asked of the CA/T representative if the Town could accept 200 cubic yards, see how it progresses and then get more. The response was that it was possible.

A motion was made to proceed with the plan for capping the landfill and to continue the negotiations with the CA/T for up to 200,000 cubic yards of fill with the possibility of increasing the amount of fill to 425,000 cubic yards. It was acknowledged that 200,000 cubic yards would not defray the cost and that the Town Meeting did vote bond authorization. There was also a request that the negotiations include hours of operation, traffic issues, testing on site, washing and covered loads on site, baiting and trapping and other issues.

The motion passed 5-0.

The Selectmen's minutes reflect little action as the trucks began delivering to the landfill around April 14, 2003. There were occasional comments in the minutes regarding traffic issues and complaints.

There is a letter from CDM to the new Town Manager dated June 16, 2003 (Attachment 2), which discusses the Add Alternate – Additional Historic Fill. CDM noted that the Town was nearing the deadline for adding materials based on the interagency agreement with Mass Highway. The Town would also need to authorize the Bid Alternate with T Ford Company, Inc. the onsite daily operations contractor. The letter also included a revenue and cost estimate that showed the landfill could generate sufficient revenues at 350,000 cubic yards so that the Town would not have to borrow. The estimated did not include any provision for the recreational fields.

In the Board of Selectmen's meeting of July 7, 2003 the new Town Manager gave an update and discussed the possibility of taking more fill and the costs involved. The meeting included Town Meeting Members, Central Artery Officers, Attorney for the Town, Inspectional Services, DPW, Conservation Commission Officials and the public. The only record of the meeting is that the town manager had until August 7, 2003 to make a decision. We were unable to find a vote by the Board of Selectmen to increase the materials accepted. The cost estimates believed to have been presented at that meeting are in Attachment 3. Note that the \$750,000 estimate for recreational fields was not included in the cost estimate.

The next reference to the landfill after that date is August 25, 2003 which states that "landfill has taken the maximum amount of fill and will form a committee on post closure use".

In a letter from CDM to the Town Manager dated November 9, 2003 (Attachment 4) there was discussion regarding a meeting with the Public Works Director, Attorney O'Brien, the Town Manager and CDM on Thursday October 23, 2003 to discuss the acceptance of additional material from the CA/T. The statement was made that the Town needs to take additional grading and shaping material to generate sufficient revenue to complete the landfill closure and perform the required post closure maintenance and monitoring. The letter goes on to state that "Based on a public meeting held on July 7, 2003, it was decided that the Town should seek approval to increase the amount of soils the site would receive from the CA/T to a total of 700,000 tons. (425,000 cubic yards) There was also discussion of an EST Associates proposal related to material from the MBTA Greenbush Commuter Rail Project. CDM prepared a financial comparison and recommended amending the contract with CA/T.

The next reference that we found in the Selectmen's minutes was May 13, 2004 where they passed out an update on the landfill. We were not able to find a copy of the update. In the July 13, 2004 minutes there is a request of the Manager to compile a brief report regarding the landfill and in the July 14, 2004 minutes the Town Manager states that he wants to address the post closure landfill use.

At a meeting on September 13, 2004 CDM gave out a revised cost summary sheet. It was stated in the minutes that "Post closure use – if any – to be decided in future. Without central artery dirt, it would cost the Town \$3M to close the landfill – out of pocket."

CDM was to get information on additional testing, number of loads taken out, thicker liner, etc. CDM indicated that they did not want the project to cost the Town. They would come back to talk about post closure use, maybe passive recreation.

In the October 18, 2004 meeting the minutes reference a breakdown of legal fees. It also states "Post closure use. Manager may have a committee".

There is very little reference to landfill issues after the October 14, 2004 meeting found in the Board of Selectmen's minutes. In the May 23, 2006 minutes there is a brief note that "construction portion of landfill completed and soon entering maintenance portion".

Financial Cost Estimates

The earliest Cost Estimate that we obtained was dated September 12, 2002 which corresponds to the Board of Selectmen vote on September 25, 2002 to proceed with 200,000 cubic yards of CA/T fill (Attachment 1).

The cost estimated was based on three scenarios for the purchase of fill and three scenarios for acceptance of CA/T fill. Each option included 70,000 cubic yards, 200,000 cubic yards and 425,000 cubic yards.

The 70,000 cubic yard options did not include an allowance for recreational fields but the other two options included a \$750,000 cost item for recreational fields. The purchase of fill options resulted in costs to the Town of \$3,345,500 for 70,000 cubic yards, \$5,637,500 for 200,000 cubic yards and \$8,112,500 for 425,000 cubic yards. The estimate for purchasing 425,000 cubic yards is unrealistic because there would have been no reason to bring in that much fill if the Town was paying for the fill.

The other three options were for the acceptance of CA/T fill. The cost estimates to the Town were \$2,313,500 for 70,000 cubic yards, \$1,997,500 for 200,000 cubic yards and a surplus of \$128,000 for 425,000 cubic yards. None of the estimates above included the cost of post Closure monitoring and maintenance estimated at \$504,000 at the time.

The estimate for engineering at the time was for \$364,000 and the detail is broken out in Attachment 1. The details for the Cap Construction changed substantially depending on the amount of fill and whether it was purchased or accepted for the CA/T proposal. The only detail included in our documents for Cap Construction was for the option of accepting 200,000 cubic yards of CA/T materials at \$2,323,500.

The Board of Selectmen voted the 200,000 cubic yard option of accepting CA/T materials which included a \$750,000 allowance for recreational fields. The net cost to the Town was estimated at \$1,997,500 and was to be funded by the bond authorization voted at the 2002 annual Town Meeting. The Selectmen reserved the right to vote acceptance of additional fill and the option to do so was incorporated into the Interagency agreement.

The next documentation is a letter to the new Town manager dated June 16, 2003 which indicates that the deadline for exercising the option to accept more fill expires by July 7, 2003. The letter indicates that as of June 13, 2003 the Town had accepted 73,400 tons of historic fill. There were costs estimates attached to the letter for 200,000 cubic yards and 350,000 cubic yard. The estimates for the original 200,000 cubic yard option changed from the previous estimate. The engineering and Cap Construction costs remained the same but the revenue estimates were increased based on the actual Interagency agreement. The estimated revenue was increased from \$2,640,000 to \$3,086,500 for an increase of \$446,500. However, the costs for site preparations also increased from \$1,200,000 to \$1,403,400 amounting to a \$203,400 increase. Of note is the fact that the \$750,000 allowance for the recreational fields was eliminated from the budget. The overall cost to the Town went from a net cost of \$1,997,500 to a net cost of \$1,000,400 as follows: Attachment 2.

Original Cost \$1,997,500
Eliminate Recreation Fields \$ (750,000)
Increased Revenue Estimate \$ (446,500)
Increased Operating Costs
Revised Cost Estimate \$1,004,400

The cost does not include the cost for Post Closure Monitoring and Maintenance which remained at \$504,000.

There is also an option presented in this document for 350,000 cubic yards of CA/T materials. This option increases revenues by \$2,159,250 offset by additional operating costs of \$703,650 resulting in a net savings to the Town of \$1,445,600 not including the Post Closure Monitoring and maintenance or the allowance for recreational fields. That would have brought the cost of the project from \$1,004,400 to a net surplus of \$451,200. With the Town's bond authorization, it appears that the recreational field could have been covered under either of these options.

Also of note is Note 7 added to this estimate that states "Does not include costs for engineering and legal services or the Clerk of the Works during site preparation and daily operations. We were unable to determine why those items were not included in the cost estimates.

We also obtained an additional cost estimate with a date stamp of July 8, 2003 with a written note of "at meeting 7-7-03." We noted in the minutes that the Town manager had given the Selectmen an update at that meeting. The cost estimate included the two options discussed above and a new cost estimate for 425,000 cubic yards of CA/T materials which brought the net surplus to the Town up to \$1,179,000 not including Post Closure monitoring and Maintenance, allowance for recreational fields or legal, engineering and clerk of the works costs stated in Note 7. (Attachment 4)

The next cost estimate located in the documents was dated November 19, 2003 which refers to a public meeting of July 7, 2003 where it was decided to take additional grading and shaping materials to generate sufficient revenue to complete the landfill closure and perform the post closure monitoring and maintenance. That letter contains cost estimates which compare the 700,000 tons (425,000 cubic yards) of fill from the CA/T project to an alternative project. In that cost estimate there were revisions to the revenue estimates for the CA/T fill of an additional \$226,625 offset by additional costs of \$34,015 for a net increase in the project surplus of \$192,610 to bring the total surplus to \$1,371,610. That surplus did not include a provision for recreational fields, post closure maintenance and monitoring or the costs identified in Note 7.

In February of 2004, an additional cost estimate was found which revises the net surplus of the project from \$1,371,610 to \$1,125,910. There is an increase in the original estimated engineering fees from \$364,000 to \$439,000 for an increase of \$75,000 for oversight for an additional 18 months of material delivery. Revenue estimates increased by \$43,109 offset by operating costs increasing by \$227,032 (Attachment 5).

The next cost estimate dated May 8, 2004 changes the net surplus from \$1,125,910 to \$1,086,282 based on minor adjustments in revenue and operating expenses (Attachment 5).

The cost estimate dated September 13, 2004 (Attachment 5) contains substantial cost estimate revisions which reduced the projected surplus from \$1,086,282 down to \$523,777 before post closure maintenance and monitoring. Note that the comparison included in the cost estimates compare to the estimate of November, 2003 rather than the revisions issued several times after that date. The primary adjustment is the inclusion of estimated costs previously omitted in Note 7 as discussed above to include Legal, Clerk of the Works, and Engineering Oversight as follows:

Legal	\$ 148,674
Clerk of the Works	\$ 125,000
Miscellaneous	\$ 56,408
Permitting & Engineering Oversight	\$ 260,000
Total	\$ 590,082

In addition, estimates for the site preparations and operation increased by \$306,261. All other estimates were revised, but not by significant amounts. The line item for recreational allowance continued to be carried at \$0. The net decrease in projected surplus, not including post closure, was \$847,833.

Also note that the Cap Construction line item was broken down into the Cap of \$1,650,000, a contingency of \$165,000 and a Landfill Gas Flare and Collection System of \$500,000.

The next projection includes cost estimates for the November 2003 projection, Attachment 5, the September 2004 projection discussed above, a March 7, 2005 projection, which varies little from the September 2004 projection and a July 12, 2005 projection which shows that the project will not generate a surplus. There are also substantial changes in the post closure monitoring and maintenance estimates.

The major changes in the July 12, 2005 estimate include an increase of \$35,276 in Administrative costs and large increases in the Cap Construction Costs. The major increase came in the cost of Capping based on the actual bids coming in and the contract being signed. The increase in cost over the previous estimate was \$846,111 or a 51% variance. The estimates for contingency and was reduced by \$130,201 and the \$500,000 estimate for the Gas Flare and Collection System was eliminated and replaced by the addition of a Parking Lot area estimated at \$370,785. The line item for recreational fields continues to contain \$0.

The Post Closure Monitoring and Maintenance estimate was dropped below the footnotes and revised to 30 years at an annual cost of \$35,000. That would result in a revised budget of \$1,050,000. The previous estimates had been \$504,000.

In a letter dated September 8, 2005, Attachment 5, CDM informs the Town manager that the Town will have sufficient funds to complete the project from the landfill account. They also indicate that the Town will have to appropriate for post closure monitoring each year. There is no mention of recreational fields.

There is a final letter from CDM dated February 28, 2007, Attachment 5, which indicates a \$180,104 balance in the landfill account. They indicate that the Town can pay post closure costs out of the account until the funds are depleted.

We have included a schedule as Attachment 6, which compares the various cost estimates provided above.

Financial Reports

We have prepared a budget to actual financial report on the project through June 30, 2008 (Attachment 7). The report compares the original project (after the decision to accept 425,000 cubic yards of fill) to the last known cost estimates from CDM compared to actual costs through June 30, 2008. We have analyzed each line item in the report.

Revenues

The revenue for the project came in higher than originally budgeted. The actual tonnage, projected and included in the Interagency agreement, was delivered as agreed. The additional revenue resulted from additional fees related to rejected materials and additional testing. We attempted to test the trucking delivery slips against receipt records but they were not retailed at the Saugus DPW office and multiple attempts to obtain slips from Mass Highways was unsuccessful. We were able to obtain schedules from CDM who logged all deliveries into a spreadsheet. Since the revenue came in as expected, we do not feel that the absence of delivery slips causes reason for concern. Attachment 8.

T. Ford & Company

The contract analysis for T. Ford and Company for Site Preparation and Daily Operations is contained as Attachment 9. The base contracts for Phase I and II amount to \$2,752,125 which is \$259,235 higher than the original estimate. In addition, there were several change orders that increased the contract amount by another \$149,557 mostly related to the handling of unacceptable materials. The actual amount paid was within the contract limits.

Administrative Costs

As noted earlier, administrative costs were not originally included in the cost projects as described in Note 7 of the cost estimates. Legal fees are a result of normal fees associated with the project and defense of a lawsuit filed by a vendor who claims breach of a verbal contract related to the project. The total legal fees through June 30, 2008 amount to \$187,970.

The amount classified as Clerk of the Works includes payments to Town employees who worked on the project. The total paid of \$212,796 includes Clerk of the Works as well as overtime for numerous tasks throughout the duration of the project. Although time sheets did not specify the tasks performed, we obtained information regarding the activities.

- 1. When the Director of Operations resigned certain administrative duties that he had performed were shifted to the DPW. None of the Union job descriptions accounted for this function so it was discussed and agreed with the Union representatives that the work would be done on an overtime basis by the administrative staff in the Department of Public Works. That administrative work continued throughout the whole project.
- 2. Throughout the whole term of the construction project, the Town operated a compost facility on the landfill site. This facility was operated on weekends and DPW employees ran the site on an overtime basis under the guidelines set by the engineers and DEP. This work was done above and beyond the regular duties performed on the compost site maintenance. Eventually, the compost site was moved away from the landfill once the project neared completion.

- 3. At different times over the construction period contractors would dump materials from water breaks and sewer breaks that was not acceptable. DPW employees removed this material and properly disposed of it in an acceptable manner. This work had to be done immediately whenever necessary and the material was taken off site.
- 4. Various maintenance duties were performed by the DPW personnel at times when it became necessary over the term of the project particularly after regular hours and on weekends when the prime contractor was not available.
- 5. Throughout the whole project, particularly during evening hours and weekends, unauthorized and illegal dumps were made when no one was around. The DPW had to remove this material and provide security on a regular basis to keep unauthorized people out of the site. Everyone was used to dumping at the site for many years and we had to stop them from doing so. We still have that problem today.

Engineering

Attachment 9 provides an analysis of the various tasks performed for the project. Although the amount paid is in excess of the contract amount, the amount paid includes some post closure monitoring that is not in the contract schedule.

R. Bates & Sons

Attachment 10 indicates that the amount paid by R. Bates and Sons was in accordance with the contract which was subject to a competitive procurement process.

Post Closure

The Town signed a contract with CDM for post closure at \$17,500 per year. The first year of the contract was for April 1, 2007 to March 31, 2008.

The original estimate for post closure was \$504,000. The estimate was later changed to \$35,000 per year which included DPW costs of maintaining the site. The CDM cost is \$17,500 per year which amounts to \$525,000. The 2009 estimate was increased to \$18,500. Post closure liability contained in the audited financial statements of June 30, 2008 is \$997,500 which includes the engineering and DPW costs of maintenance over a thirty year period.

Attachment 1

Cost Estimates 3 Options Purchased Fill / CA/T Fill





One Cambridge Place, 50 Hampshire Street Cambridge, Massachusetts 02139 tel: 617 452-6000

tel: 617 452-6000 fax: 617 452-8000

September 12, 2002

Director of Operations Town of Saugus 298 Central Street Saugus, Massachusetts 01906

Subject:

Estimates of Costs for Closure of Saugus Landfill and Acceptance of

Historic Fill from the Central Artery Project

Dear Mr. Nigro:

As requested, Camp Dresser & McKee Inc. (CDM) has prepared the attached summary tables showing the following information related to the Saugus landfill:

- Estimated range of engineering fees for the tasks required by the Administrative Consent Order and the Solid Waste Management Regulations (310 CMR 19.000) promulgated by the Massachusetts Department of Environmental Protection (DEP). These tasks will need to be completed whether the Town accepts Central Artery soils or not.
- Breakdown of estimated costs for the construction of the final cap over the landfill site and post-closure maintenance and monitoring in accordance with DEP regulations. These costs are based on CDM's recent experience capping numerous municipal landfills in eastern Massachusetts.
- Summary of estimated alternative costs and revenues associated with options to either purchase 70,000; 200,000; and 425,000 cubic yards of soils to grade the landfill site and for receiving the same quantities from the Central Artery project. These costs are based on CDM's experience with several other sites and preliminary discussions with the Central Artery.



Mr. Kevin L. Nigro September 12, 2002 Page 2

We are available to meet with you to discuss these cost estimates and any other aspects of the project. Please do not hesitate to contact me at (617) 452-6541 if you have any questions or require anything further.

Very truly yours,

Bruce W. Haskell, P.E.

c: Michelle O'Brien, Moehrke Mackie & Shea Richard Spieler, CDM

TOWN OF SAUGUS MAIN STREET LANDFILL CLOSURE PROJECT - CAPPING ALTERNATIVES ESTIMATED COST AND PROJECTED REVENUE SUMMARY

CAP LANDFILL IN COMPLIANCE WITH DEP REGULATIONS

Cost/Revenue Items		000 cy rchase	200,000 cy Purchase	425,000 cy Purchase	70,000 cy CA/T	200,000 cy CA/T	425,000 cy CA/T
Landfill Cap Capital Engineering Cap Construction Recreational Fields (allowance)	, ,	\$364,000) ,093,500) \$0	(\$364,000) (\$4,523,500) (\$750,000)	(\$364,000) (\$6,998,500) (\$750,000)	(\$364,000) (\$2,323,500) \$0	(\$364,000) (\$2,323,500) (\$750,000)	(\$364,000) (\$2,323,500) (\$750,000)
Sub	total (\$3	,457,500)	(\$5,637,500)	(\$8,112,500)	(\$2,687,500)	(\$3,437,500)	(\$3,437,500)
Revenues Gross Revenues: CA/T Soils ³ Operating Cost ⁴ Start-Up Cost ⁵		\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$924,000 (\$350,000) (\$200,000)	\$2,640,000 (\$1,000,000) (\$200,000)	(\$200,000)
Sub	total	\$0	\$0	\$0	\$374,000	\$1,440,000	\$3,565,500
Capital Costs (Cap - Reve	nue) (\$3	,457,500)	(\$5,637,500)	(\$8,112,500)	(\$2,313,500)	(\$1,997,500)	\$128,000

General Information Post Closure Monit./Maint.(total over 30 years)	\$504,000	\$504,000	\$504,000	\$504,000	\$504,000	\$504,000
Soil Delivery in Months (50 trucks/day avg.) ⁶	3	9	19	3	9	19

Note: Negative amounts (e.g. costs to the Town) are shown in parentheses.

⁶ Based on receipt of 1,000 cy/day, 5 days/wk.



¹ Average of estimated range of engineering fees shown on attached summary.

² Details of cap construction costs are provided on attached spreadsheet. Columns titled "Purchase" include average estimated cost of purchasing and placing "clean" fill (\$11.00/cy).

Based on a hypothetical tipping fee of \$8.00/ton for 70,000 cy or 200,000 cy of CA/T material. Revenue for 425,000 cy of CA/T fill is based on hypothetical tipping fee of \$8.00/ton for first 60,000 cy and \$8.50/ton for 365,000 cy of material. These figures require conversion of tons to cubic yards or vice versa (1 ton = 1.65 x 1 cy).

⁴Based on estimated 1,000 cy of material received per day. Site operations costs are approximately \$5.00/cy for weighing, placing, and spreading material. This assumes an average of 50 trucks/day @ 20 cy (33 tons) per truck.

⁵ Includes site preparation costs for stormwater basins, access road, etc.

Main Street Landfill, Saugus, Massachusetts Engineering Fees Associated With Design and Construction For Capping and Closure

Comprehensive Site Assessment	\$125,000 - \$150,000
Wetlands Permitting	\$ 30,000 - \$ 40,000
Closure Design and DEP Permitting	\$ 50,000 - \$ 60,000
Bidding Services	\$ 8,000 - \$ 10,000
Construction Services	\$100,000 - \$125,000
DEP Meetings/ General Consulting	\$ 10,000 - \$ 20,000
Total Engineering Fees	\$323,000 - \$405,000

Attachment 2

Additional Fill Cost Estimates



One Cambridge Place, 50 Hampshire Street Cambridge, Massachusetts 02139 tel: 617 452-6000 fax: 617 452-8000



June 16, 2003

Mr. Andrew Bisignani Town Manager Saugus Town Hall 298 Central Street Saugus, Massachusetts 01906

Subject:

Add Alternate - Additional Historic Fill

Site Preparation and Daily Operations, Main Street Landfill

Saugus, Massachusetts

Dear Mr. Bisignani:

As you are aware, the Town of Saugus is currently under an Interagency Agreement (Agreement) by and between the town and the Massachusetts Highway Department (MHD) for the acceptance of 200,000 cubic yards of historic fill (materials) from the Central Artery/Tunnel (CA/T) Project. If the town has interest in accepting materials in addition to the 200,000 cubic yards, the town has the option of requesting an extension or amendment to the Agreement to provide for acceptance of additional materials. However, the town only has 120 calendar days after the Commencement Date, i.e., by July 7, 2003, to notify MHD in writing of its interest in accepting additional materials. Given this date is fast approaching, and our understanding that MHD has sent a letter to the town requesting a confirmation of interest, we would like to request a meeting with you to discuss the town's interest in receiving additional material.

Of note, if the town were interested in receiving additional materials, the town would also need to authorize the Bid Add Alternate with T Ford Company, Inc. (TFCI), the onsite daily operations contractor, within 120 calendar days from the effective date of the construction contract, i.e. by July 8, 2003.

If the town has interest, but requires more time to finalize a decision, the town and CDM can work with MHD and TFCI to extend the notification dates for proceeding with additional materials.



Mr. Andrew Bisignani June 16, 2003 Page 2

For your reference, as of June 13, 2003 day end, approximately 73,400 tons of historic fill has been delivered to the Main Street Landfill. We have also attached a table summarizing the costs/revenues for receipt of materials from the CA/T Project.

If you have any questions or would like to schedule a meeting, please do not hesitate to contact me at 617-452-6580.

Verytruly/vours,

Richard J. Spieler P.E.

Camp Dresser & McKee Inc.

Attachment

c: K. Nigro - Saugus

M. O'Brien, Esq., Moehrke, Mackie & Shea, PC

J. Rogers - CDM

Town of Saugus Main Street Landfill Closure Project Estimated Cost and Project Revenue Summary



Cap Landfill in Compliance with DEP Regulations Using either 200,000 or 350,000 Cubic Yards of Central Artery Historic Fill

Cost Items		CA/T H	istoric Fill
Revenue Items		200,000 cy	350,000 cy
Landfill Cap Capital			
Engineering ¹		(\$364,000)	(\$364,000)
Cap Construction ²		(\$2,323,500)	(\$2,323,500)
Recreational Fields (allowance)		\$0	\$0
St	ubtotal:	(\$2,687,500)	(\$2,687,500)
Acceptance of Shaping & Grading Materials			
Revenues from CA/T Project ³ - 200,000 cy		\$3,086,500	\$3,086,500
Revenues from CA/T Project ³ - Add 150,000 cy		-	\$2,159,250
St	ubtotal:	\$3,086,500	\$5,245,750
Placement of Shaping and Grading Materials			
Site Preparation and Daily Operations ^{4,5,7} - 200,000 cy		(\$1,403,400)	(\$1,403,400)
Site Preparation and Daily Operations 4,5,6,7 - Add 150,000 cy	,	-	(\$703,650)
Su	ıbtotal:	(\$1,403,400)	(\$2,107,050)
Remaining Deficit/Revenue After Ca	pping ⁷ :	(\$1,004,400)	\$451,200
Dood Classes Maritarian and Mariatanana			
Post Closure Monitoring and Maintenance Engineering (total over 30 years) ⁸		(\$504,000)	(\$504,000)
Remaining Deficit/Revenue After Capping and Post Cl	osure ⁷ :	(\$1,508,400)	(\$52,800)

NOTES:

- 1 Average of estimated range of engineering fees provided in correspondence dated September 12, 2002...
- 2 Details of cap construction costs provided in correspondence dated September 12, 2002.
- 3 Based on Interagency Agreement between the Town of Saugus and MHD for acceptance of 200,000 cy of historic fill.

 The fee terms of the Interagency Agreement will need to be renegotiated for acceptance of additional 150,000 cy of historic fill.
- 4 Based on T Ford Company, Inc. bid for Site Preparation and Daily Operation for 200,000 cy and subsequent 150,000 cy. Does not include bid for Tier II testing, which is direct pass through to MHD. Does not include any change orders.
- 5 Assumes 39 weeks of daily operations for delivery of 200,000 cy of historic fill.
- 6 Assumes 30 additional weeks for delivery of additional 150,000 cy of historic fill.
- 7 Does not include costs for engineering and legal services or Clerk of the Works during site preparation and daily operations.
- 8 Solid Waste Management Regulations (310 CMR 19.000) require Post Closure Monitoring/Maintenance for 30 years after final closure.

Attachment 3
Cost Estimate July 7, 2008

Town of Saugus

Main Street Landfill Closure Project

Estimated Cost and Project Revenue Summary

Original Analysis
Cap Landfill in Compliance with DEP Regulations

JUL 08 2003

atmeeting 2-7-03

Using either 200,000; 350,000; or 425,000 Cubic Yards of Central Artery Historic

Cost Items	Total	al CA/T Histor	A/T Historic Fill		
Revenue Items	200,000 cy	350,000 cy	425,000 cy		
			1700000		
Landfill Cap Capital			(ton)		
Engineering ¹	(\$364,000)	(\$364,000)	(\$364,000)		
Cap Construction ²	(\$2,323,500)	(\$2,323,500)	(\$2,323,500		
Recreational Fields (allowance)	\$0	\$0	\$0		
Subtotal:	(\$2,687,500)	(\$2,687,500)	(\$2,687,500		
Acceptance of Shaping & Grading Materials					
Revenues from CA/T Project ³ - 200,000 cy	\$3,086,500	\$3,086,500	\$3,086,500		
Revenues from CA/T Project ³ - Add 150,000 cy	-	\$2,159,250	\$2,159,250		
Revenues from CA/T Project ³ - Add 75,000 cy	-	-	\$1,079,625		
Subtotal:	\$3,086,500	\$5,245,750	\$6,325,375		
Placement of Shaping and Grading Materials					
Site Preparation and Daily Operations ^{4,5,7} - 200,000 cy	(\$1,403,400)	(\$1,403,400)	(\$1,403,400		
Site Preparation and Daily Operations 4,5,6,7 - Add 150,000 cy		(\$703,650)	(\$703,650)		
Site Preparation and Daily Operations 4,5,6,7,8,9 - Add 75,000 cy	-	-	(\$351,825)		
	(\$1,403,400)	(\$2,107,050)	(\$2,458,875		
Remaining Deficit/Revenue After Capping ⁷	(\$1,004,400)	\$451,200	\$1,179,000		
Dood Olonous Manifesium and Maintenance					
Post Closure Monitoring and Maintenance	(0504.000)	(0504 005)	(0.00 + 0.00)		
Engineering (total over 30 years) ⁹	(\$504,000)	(\$504,000)	(\$504,000)		
Remaining Deficit/Revenue After Capping and Post Closure7	(\$1,508,400)	(\$52,800)	\$675,000		

NOTES:

- 1 Average of estimated range of engineering fees provided in correspondence dated September 12, 2002.
- 2 Details of cap construction costs provided in correspondence dated September 12, 2002.
- 3 Based on Interagency Agreement between the Town of Saugus and MHD for acceptance of 200,000 cy of historic fill. The fee terms of the Interagency Agreement will need to be renegotiated for acceptance of additional historic fill over 200,000 cy.
- 4 Based on T Ford Company, Inc. bid for Site Preparation and Daily Operation for 200,000 cy and subsequent 150,000 cy. Does not include bid for Tier II testing, which is direct pass through to MHD. Does not include any change orders.
- 5 Assumes 39 weeks of daily operations for delivery of 200,000 cy of historic fill.
- 6 Assumes 30 additional weeks for delivery of additional 150,000 cy of historic fill.
- 7 Does not include costs for engineering and legal services or Clerk of the Works during site preparation and daily operations.
- 8 Assumes 15 additional weeks for delivery of additional 75,000 cy of historic fill.
- 9 Based on T Ford Company, Inc. bid prices. The fee will need to be renegotiated for acceptance of additional historic fill over 350,000 cy.
- 10 Solid Waste Management Regulations (310 CMR 19.000) require Post Closure Monitoring/Maintenance for 30 years after final closure.

Attachment 4

November 19, 2003 CDM Letter Cost Estimate





One Cambridge Place, 50 Hampshire Street Cambridge, Massachusetts 02139 tel: 617 452-6000 fax: 617 452-8000

November 19, 2003

Mr. Andrew Bisignani Town Manager Town of Saugus 298 Central Street Saugus, Massachusetts 01906

Subject:

Town of Saugus Landfill

Acceptance of Additional Material

Dear Mr. Bisignani:

On Thursday October 23, 2003 Joe Attubato, Public Works Director, Michelle O'Brien, Moehrke, Mackie and Shea, and I met in your office to discuss the acceptance of additional material from the Central Artery/ Third Harbor Tunnel (CA/T) project. At that time we also discussed the proposal from EST Associates dated October 15, 2003 to accept material from the MBTA Greenbush Commuter Rail project.

As we discussed, the Town needs to take additional grading and shaping material to generate sufficient revenue to complete the landfill closure and perform the required post-closure maintenance and monitoring. Based on a public meeting held on July 7, 2003, it was decided that the Town should seek approval to increase the amount of soils the site would receive from the CA/T to a total of 700,000 tons. The CA/T project has indicated that it has the quantities available to deliver the material to the site in a timely manner. The Interagency Agreement between the Town and CA/T anticipated the potential increase in quantities of soils accepted by the Town and states if the Town wishes to receive additional soils, the CA/T should make reasonable efforts to accommodate this request. Michelle O'Brien and I have met with the CA/T to discuss the terms for acceptance of the material at the site. The attached pricing summary outlines the funds that would be generated for the additional 370,000 tons of CA/T received.

In a letter dated October 15, 2003 EST Associates and T Ford Company, Inc. (TFCI) proposed an alternative source of soil to be used for the grading and shaping of the landfill in lieu of the CA/T material. EST/TFCI proposed to pay the Town a tip fee of \$5 per ton for each ton of soil delivered to site. Their proposal stated that this fee would serve as full compensation to the Town for landfill access. Cost for material transportation, handling and final placement would be borne by EST/TFCI.



Andrew Bisignani November 19, 2003 Page 2

The attached table compares the revenues projected to be realized from each proposal. Based on the assumption highlighted in the table, the CA/T option will yield the Town more net revenues than the EST/TFCI proposal.

Based on an initial review of the EST/TFCI letter proposal and our understanding of the CA/T Interagency Agreement, the CA/T proposal has the following benefits:

- More net revenues would be generated from the same quantity of soil.
- There is an existing Interagency Agreement between CA/T and the Town, which only requires minor modification versus negotiation of a new agreement with EST/TFCI.
- The Saugus project has been presented to the public as only receiving material from the CA/T project. A change in the source of the soil may require additional public meetings.

Based on the above we recommend that the Town finalize negotiations with the CA/T to accept the additional soil from the CA/T project.

If you have any question or require any additional information, please feel free to call me at 617-452-6580.

Very truly yours,

Richard J. Spieler P.E.

Principal / / Camp Dresser & McKee Inc.

c: Joe Attubato, Saugus Michelle O'Brien, Moehrke, Mackie & Shea, PC

Town of Saugus Main Street Landfill Closure Project Estimated Cost and Project Revenue Summary

Cap Landfill in Compliance with DEP Regulations Approved 700,000 tons of Historic Fill from CA/T vs EST/TFCI

cost Items	CA/T	EST/TFCI	
Revenue Items	700,000 tons	700,000 tons	
andfill Cap Capital			
Engineering ¹	(\$364,000)	(\$364,000)	
Cap Construction ²			
Recreational Fields (allowance)	(\$2,323,500) \$0	(\$2,323,500) \$0	
Subtotal:	(\$2,687,500)	(\$2,687,500)	
Acceptance of Shaping & Grading Materials			
Revenues from CA/T Project ³ - 200,000 cy(330,000 tons)	\$3,086,500	\$3,086,500	
Revenues from CA/T Project ³ - Add 224,242 cy(370,000 tons)	\$3,465,500	\$1,850,000	
Subtotal:	\$6,552,000	\$4,936,500	
lacement of Shaping and Grading Materials			
lacement of Shaping and Grading Materials Site Preparation and Daily Operations ^{4,5,7} - 200,000 cy	(\$1,403,400)	(\$1,403,400)	
Site Preparation and Daily Operations ^{4,5,7} - 200,000 cy	, , ,	(\$1,403,400) \$0	
Site Preparation and Daily Operations ^{4,5,7} - 200,000 cy Site Preparation and Daily Operations ^{4,6,7} - Add 150,000 cy	(\$703,650)	\$0	
Site Preparation and Daily Operations ^{4,5,7} - 200,000 cy	, , ,	1	
Site Preparation and Daily Operations ^{4,5,7} - 200,000 cy Site Preparation and Daily Operations ^{4,6,7} - Add 150,000 cy Site Preparation and Daily Operations ^{4,6,7} - Add 74,242 cy	(\$703,650) (\$385,840)	\$0 \$0	
Site Preparation and Daily Operations ^{4,5,7} - 200,000 cy Site Preparation and Daily Operations ^{4,6,7} - Add 150,000 cy Site Preparation and Daily Operations ^{4,6,7} - Add 74,242 cy Subtotal: Remaining Deficit/Revenue After Capping ⁷ :	(\$703,650) (\$385,840) (\$2,492,890)	\$0 \$0 (\$1,403,400)	
Site Preparation and Daily Operations ^{4,5,7} - 200,000 cy Site Preparation and Daily Operations ^{4,6,7} - Add 150,000 cy Site Preparation and Daily Operations ^{4,6,7} - Add 74,242 cy Subtotal: Remaining Deficit/Revenue After Capping ⁷ : ost Closure Monitoring and Maintenance	(\$703,650) (\$385,840) (\$2,492,890) \$1,371,610	\$0 \$0 (\$1,403,400) \$845,600	
Site Preparation and Daily Operations ^{4,5,7} - 200,000 cy Site Preparation and Daily Operations ^{4,6,7} - Add 150,000 cy Site Preparation and Daily Operations ^{4,6,7} - Add 74,242 cy Subtotal: Remaining Deficit/Revenue After Capping ⁷ :	(\$703,650) (\$385,840) (\$2,492,890)	\$0 \$0 (\$1,403,400)	

OTES:

- 1 Average of estimated range of engineering fees provided in correspondence dated September 12, 2002..
- 2 Details of cap construction costs provided in correspondence dated September 12, 2002.
- 3 Based on Interagency Agreement between the Town of Saugus and MHD for acceptance of 200,000 cy of historic fill.

 The fee terms of the Interagency Agreement will need to be renegotiated for acceptance of additional 224,242 cy of historic fill.

 EST/TFCI proposed \$5 per ton tipping fee.
- 4 For CA/T option cost based on T Ford Company, Inc. bid for Site Preparation and Daily Operation for 200,000 cy and subsequent 224,242 cy. Does not include bid for Tier II testing, which is a direct pass through to MHD. Does not include any change orders. For EST/TFCI proposal no cost is associated with the placement of the soils.
- 5 Assumes 39 weeks of daily operations for delivery of 200,000 cy of historic fill.
- 6 Assumes 50 additional weeks for delivery of additional 274,242 cy of historic fill.
- 7 Does not include costs for engineering and legal services or Clerk of the Works during site preparation and daily operations.
- 8 Solid Waste Management Regulations (310 CMR 19.000) require Post Closure Monitoring/Maintenance for 30 years after final closure.

Attachment 5
Remaining Cost Estimates

Town of Saugus

Main Street Landfill Closure Project

Projected Cost and Project Revenue vs. Revised Projected Cost

Cap Landfill in Compliance with DEP Regulations Approved 700,000 tons of Historic Fill from CA/T

Cost Items	Projected	Revised 1
Revenue Items	700,000 tons	7,00,000 tons
Landfill Cap Capital		
Engineering ¹	(\$364,000)	(\$439,000)
Cap Construction ^{2,10}		
Recreational Fields (allowance)	(\$2,323,500) \$0	(\$2,310,277)
Subtotal:		\$0
Subtotal:	(\$2,687,500)	(\$2,749,277)
Acceptance of Shaping & Grading Materials		
Phase I Revenues from CA/T Project ³ - 200,000 cy(330,000 tons)	\$3,086,500	\$3,063,509
Phase II Revenues from CA/T Project ⁴ - Add 224,242 cy(370,000 tons)	\$3,465,500	\$3,531,600
Subtotal:	\$6,552,000	\$6,595,109
Placement of Shaping and Grading Materials		21
Site Preparation and Daily Operations - Phase I 5.6 - 200,000 cy	(\$1,403,400)	(\$1,426,272)
Site Preparation and Daily Operations - Phase II 7.8 - Add 150,000 cy	(\$703,650)	(\$734,400)
Site Preparation and Daily Operations - Phase IIA 7.8 - Add 74,242 cy	(\$385,840)	(\$559,250)
Subtotal:	(\$2,492,890)	(\$2,719,922)
Remaining Deficit/Revenue After Capping ⁸ :	\$1,371,610	\$1,125,910
ost Closure Monitoring and Maintenance		
Engineering (total over 30 years) ⁹	(\$504,000)	(\$504,000)
Remaining Deficit/Revenue After Capping and Post Closure ⁸ :	\$867,610	\$621,910

NOTES:

- 1 Average of estimated range of engineering fees provided in correspondence dated September 12, 2002. Revised projection includes oversight for additional 18 months of material delivery.
- 2 Details of cap construction costs provided in correspondence dated September 12, 2002 include implementation costs.
- 3 Based on Interagency Agreement between the Town of Saugus and MHD for acceptance of 200,000 cy of historic fill.
- 4 Based on Amended Interagency Agreement between the Town of Saugus and MHD for acceptance of 200,000 cy of historic fill.
- 5 Does not include bid for Tier II testing, which is a direct pass through to MHD. Includes change orders for waste relocation and material placement.
- 6 Assumed 39 weeks of daily operations for delivery of 200,000 cy of historic fill. Actual operation was 41 weeks.
- 7 Assumes 50 additional weeks for delivery of additional 224,242 cy of historic fill.
- 8 Does not include costs for engineering and legal services or Clerk of the Works during site preparation and daily operations.
- 9 Solid Waste Management Regulations (310 CMR 19.000) require Post Closure Monitoring/Maintenance for 30 years after final closure.
- 10 Revised due to payment for stormwater basin modifications.

Table 2

Town of Saugus

Main Street Landfill Closure Project

Projected Cost and Project Revenue vs. Revised Projected Cost

Cap Landfill in Compliance with DEP Regulations
Approved 700,000 tons of Historic Fill from CA/T

Cost Items	para Par Highlian Jakingga ay Til	Projected	Revised 11
Revenue flems	살펴 그 그런 아침 바다 뭐하셨다.	700,000 tons	700,000 tons
Landfill Cap Capital			
Engineering ¹		(\$364,000)	(\$439,000)
Cap Construction ^{2,10}		(\$2,323,500)	(\$2,310,277)
Recreational Fields (allowance)		\$0	\$0
	Subtotal:	(\$2,687,500)	(\$2,749,277)
Acceptance of Shaping & Grading Materia	Is		
Phasa I Revenues from CA/T Project ³ - 2	200,000 cy(330,000 tons)	\$3,086,500	\$3,122,500
Phase II Revenues from CA/T Project4	Add 224,242 cy(370,000 tons)	\$3,465,500	\$3,465,500
	Subtotal:	\$6,552,000	\$6,588,000
Placement of Shaping and Grading Materials			
Site Preparation and Daily Operations - Phase	e I ^{5,6} - 200,000 cy	(\$1,403,400)	(\$1,458,791)
Site Preparation and Daily Operations - Phase	e II ^{7,8} - Add 150,000 cy	(\$703,650)	(\$734,400)
Site Preparation and Daily Operations - Phase	e IIA ^{7,8} - Add 74,242 cy	(\$385,840)	(\$559,250)
	Subtotal:	(\$2,492,890)	(\$2,752,441)
Rem	aining Deficit/Revenue After Capping ⁸ :	\$1,371,610	\$1,086,282
Post Closure Monitoring and Maintenance			
Engineering (total over 30 years)9		(\$504,000)	(\$504,000)
Remaining Deficit/Rev	enue After Capping and Post Closure ⁸ :	\$867,610	\$582,282

NOTES:

- 1 Average of estimated range of engineering fees provided in correspondence dated September 12, 2002. Revised projection includes oversight (or additional 18 months of material delivery.
- 2 Details of cap construction costs provided in correspondence dated September 12, 2002 include implementation costs,
- 3 Based on Interagency Agreement between the Town of Saugus and MHD for acceptance of 200,000 cy of historic IIII.
- 4 Based on A nended Interagency Agreement Detween the Town of Saugus and MHD for acceptance of 200,000 cy of historic IIII.
- 5 Does not include bid for Tier II testing, which is a direct pass through to MHD. Includes change orders for waste relocation and material placement.
- 6 Assumed 39 weeks of daily operations for delivery of 200,000 cy of historic fill. Actual operation was 41 weeks.
- 7 Assumes 50 additional weeks for delivery of additional 224,242 cy of historic fill.
- 8 Does not Include costs for engineering and legal services or Clerk of the Works during site preparation and daily operations.
- 9 Solid Waste Management Regulations (310 CMR 19.000) require Post Closure Monitoring/Maintenance for 90 years after final closure.
- 10 Revised due to payment for stormwater basin modifications.
- 11 Revised as of May 8, 2004,

Table 2 Town of Saugus

Main Street Landfill Closure Project

Projected Cost and Project Revenue vs. Revised Projected Cost

13-Sep-04

Cap Landfill in Compliance with DEP Regulations
Approved 700,000 tons of Historic Fill from CA/T

	Projected	Revised ¹¹
Cost and Revenue Items	700,000 tons	700,000 tons
Revenues from Acceptance of Shaping & Grading Materials		
Phase I Revenues from CA/T Project ³ - 200,000 cy(330,000 tons)	\$3,086,500	\$3,122,500
Phase II Revenues from CA/T Project ⁴ - Add 224,242 cy(370,000 tons)	\$3,465,500	\$3,465,500
Subtotal:	\$6,552,000	\$6,588,000
Contractor Costs for Placement of Shaping and Grading Materials		
Site Preparation and Daily Operations - Phase I ^{5,6} - 200,000 cy	(\$1,403,400)	(\$1,458,791)
Site Preparation and Daily Operations - Phase II 7,8 - Add 150,000 cy	(\$703,650)	(\$762,050)
Site Preparation and Daily Operations - Phase IIA 7,8 - Add 74,242 cy	(\$385,840)	(\$578,300)
Subtotal:	(\$2,492,890)	(\$2,799,141)
Administrative Costs During Placement of Grading and Shaping Materials		
Legal		(\$148,674)
Clerk of the Works		(\$125,000)
Miscellaneous		(\$56,408)
Permitting and Engineering Oversight		(\$260,000)
Subtotal:	\$0	(\$590,082)
Landfill Cap Capital Costs		
Engineering ¹	(\$364,000)	(\$360,000)
Cap Construction ²	(\$2,323,500)	(+/
Cap 16.5 acres @ \$100,000 per acre	(\$2,020,000)	(\$1,650,000)
Contigency (10%)		(\$165,000)
Landfill Gas Flare and Collection System		(\$500,000)
Recreational Fields (allowance)	\$0	\$0
Subtotal:	(\$2,687,500)	(\$2,675,000)
D. S. M.D. San Mark Compines	¢4 274 640	¢500 777
Remaining Deficit/Revenue After Capping ⁸ :	\$1,371,610	\$523,777
Post Closure Monitoring and Maintenance	14	i i
Engineering (total over 30 years) ⁹	(\$504,000)	(\$504,000)
Remaining Deficit/Revenue After Capping and Post Closure ⁸ :	\$867,610	\$19,777

NOTES

- 1 Actual estimated fees for closure related engineering based on current contracts and future anticipated work.
- 2 Details of cap construction costs provided in correspondence dated September 12, 2002. Estimate updated based on current information
- 3 Based on Interagency Agreement between the Town of Saugus and MHD for acceptance of 200,000 cy of historic fill.
- 4 Based on Amended Interagency Agreement between the Town of Saugus and MHD for acceptance of 200,000 cy of historic fill.
- 5 Does not include bid for Tier II testing, which is a direct pass through to MHD.
- 6 Assumed 39 weeks of daily operations for delivery of 200,000 cy of historic fill. Actual operation was 41 weeks.
- 7 Assumes 50 additional weeks for delivery of additional 224,242 cy of historic fill.
- 8 Costs for legal services and miscellaneous through June 12, 2004. Costs for engineering and clerk of the works prorated through January 26, 2005
- 9 Solid Waste Management Regulations (310 CMR 19.000) require Post Closure Monitoring/Maintenance for 30 years after final closure.
- 10 Revised due to payment for stormwater basin modifications.





Memorandum

To:

Andrew Bisignani, Town of Saugus

From:

Chris Koehler, CDM

Date:

July 13, 2005

Subject: Account Summary, Landfill Closure Project

According to CDM's estimates, the Town should still have enough funds in the landfill account to award the contract. CDM has revised the estimate of Project Cost vs. Revenue Projections which is summarized on the attached Table 2.

The right hand column has been revised using information received from the Town. Please note that CDM is only carrying \$34,799 for contingencies where we typically reserve 5% for contingencies, which would be approximately \$143,350. The Town will have enough funds to construct the cap; however, as we stated previously, the Post-Closure Maintenance Fund be under-funded or not funded at all depending on the contingencies that arise during construction. This means the Town will need to appropriate funds each year for post-closure monitoring and maintenance.

As of July 12, 2005, the Town is showing approximately \$74,500 in Miscellaneous Expenses. CDM advises the Town to research these expenses to ensure no erroneous expenses were included in that category.

Please feel free to contact me at (617) 452-6668 if you have any questions or concerns.

cc: Ed Nazaretian, CDM Paul Ross, CDM

Table 2 Town of Saugus

Main Street Landfill Closure Project

Projected Cost and Project Revenue vs. Revised Projected Cost

Cap Landfill in Compliance with DEP Regulations Approved 700,000 tons of Historic Fill from CA/T

	Projected	Revised ¹⁰	As of 3/7/05	As of 7/12/0
Cost and Revenue Items	700,000 tons	700,000 tons	700,000 tons	700,000 ton
Revenues from Acceptance of Shaping & Grading Materials				
Phase I Revenues from CA/T Project ³ - 200,000 cy(330,000 tons)	\$3,086,500	\$3,122,500	\$3,122,500	\$3,122,500
Phase II Revenues from CA/T Project ⁴ - Add 224,242 cy(370,000 tons)	\$3,465,500	\$3,465,500	\$3,479,399	\$3,479,399
Subtotal:	\$6,552,000	\$6,588,000	\$6,601,899	\$6,601,899
Contractor Costs for Placement of Shaping and Grading Materials				
Site Preparation and Daily Operations - Phase I 5,6 - 200,000 cy	(\$1,403,400)	(\$1,458,791)	(\$1,458,791)	(\$1,458,791
Site Preparation and Daily Operations - Phase II 7 - Add 150,000 cy	(\$703,650)	(\$762,050)	(\$684,652)	(\$684,652)
Site Preparation and Daily Operations - Phase IIA 7,9 - Add 74,242 cy	(\$385,840)	(\$578,300)	(\$571,403)	(\$571,403)
Subtotal:	(\$2,492,890)	(\$2,799,141)	(\$2,714,845)	(\$2,714,845
Administrative Costs During Placement of Grading and Shaping Materials				
Legal		(\$148,674)	(\$124,845)	(\$125,575)
Clerk of the Works		(\$125,000)	(\$150,405)	(\$165,377)
Miscellaneous		(\$56,408)	(\$56,408)	(\$74,406)
Permitting and Engineering Costs		(\$260,000)	(\$260,000)	(\$260,000)
Subtotal:	\$0	(\$590,082)	(\$591,657)	(\$625,358)
Landfill Cap Capital Costs				
Engineering ¹	(\$364,000)	(\$360,000)	(\$360,000)	(\$360,000)
Cap Construction ^{2,8}	(\$2,323,500)			
Cap 16.5 acres @ \$100,000 per acre		(\$1,650,000)	(\$1,650,000)	(\$2,496,111
Contingency		(\$165,000)	(\$165,000)	(\$34,799)
Parking Lot Area (Formerly for Landfill Gas Flare)		(\$500,000)	(\$500,000)	(\$370,785)
Recreational Fields (allowance)	\$0	\$0	\$0	\$0
Subtotal:	(\$2,687,500)	(\$2,675,000)	(\$2,675,000)	(\$3,261,695
Remaining Deficit/Revenue After Capping ⁸	\$1,371,610	\$523,777	\$620,396	\$0

- 1 Average of estimated range of engineering fees provided in correspondence dated September 12, 2002. Revised projection includes oversight for additional 18 months of material delivery.
- 2 Details of cap construction costs provided in correspondence dated September 12, 2002 include implementation costs.
- 3 Based on Interagency Agreement between the Town of Saugus and MHD for acceptance of 200,000 cy of historic fill.
 4 Based on Amended Interagency Agreement between the Town of Saugus and MHD for acceptance of 200,000 cy of historic fill.
 5 Does not include bid for Tier II testing, which is a direct pass through to MHD.
- 6 Assumed 39 weeks of daily operations for delivery of 200,000 cy of historic fill. Actual operation was 41 weeks.
- 7 Assumes 50 additional weeks for delivery of additional 224,242 cy of historic fill.
- 8 Revised due to payment for stormwater basin modifications.
- 9 Site Preparation and Daily Operations Contract is still ongoing and final invoice is still pending. This amount is an estimate of final project costs.
- 10 Revised as of September 3, 2004.

Post Closure Monitoring and Maintenance Engineering (total over 30 years) ¹¹	Annual Appropriation
Annual Cost of Post Closure Monitoring and Maintenance 11:	\$35,000

11 Solid Waste Management Regulations (310 CMR 19.000) require Post Closure Monitoring/Maintenance for 30 years after final closure.



Memorandum

To:

Andrew Bisignani, Town of Saugus

From:

Daniel Guglielmi, CDM

Date:

September 8, 2005

Subject: Account Summary, Landfill Closure Project

According to CDM's estimates, the Town should have enough funds in the landfill account for the Main Street Landfill Closure Construction project. The recent payment requisition, No. 24, from T Ford Company, Inc. (T Ford) was already factored into CDM's project estimates. A summary of project revenues versus project cost is shown below.

Revenues from Landfill Project	\$6,753,903.68
Payments to T Ford (Including Pay. Req. No. 24)	(\$2,800,244.70)
Estimated Final Payment to T Ford	(\$69,696.35)
Subtotal	\$3,883,963.63
Total Estimated Engineering Fees	(\$620,000.00)
Projected Cost of Cap Construction	
R. Bates & Sons, Inc. (Bates) Project Base Bid	(\$2,495,427.00)
Bates Project Add Alternate Bid (Parking Lot)	(\$370,785.00)1
Contingency	
Subtotal	\$365,358.00
Administrative Costs (As of July 12, 2005)	
/ Legal	(\$125,575.00)
Clerk of the Works	(\$165,377.00)
Miscellaneous	(\$74,406.00)
Total	50

¹ Cost may change pending DEP approval of the 'paving only' option for the parking lot.

² Contingency is only 1.13%, which is less than the typical 5%.



Memorandum

To:

Andrew Bisignani, Town of Saugus

From:

Daniel Guglielmi, P.E., CDM

Date:

February 28, 2007

Subject: Main Street Landfill Closure Project Completion

Now that the closure construction is complete, CDM would like to review the project and update the Town of Saugus (Town) on its status. The closure construction certification report has recently been submitted to the Massachusetts Department of Environmental Protection (MassDEP). Once MassDEP's approval of the certification report has been received, the Main Street Landfill will be officially capped and closed. CDM has also recently submitted a revised post-closure monitoring and maintenance plan for the Main Street Landfill. This plan summarizes the responsibilities of the Town throughput the post-closure period. This plan is also awaiting MassDEP approval; however, since the closure construction is complete, the Town is required to start post-closure monitoring at this time. CDM is currently drafting a proposal for these services and will be forwarding it under separate cover.

Below is a review of project revenues versus expenses.

Revenues from Landfill Project	\$6,753,903.68
Total Payments to T Ford Company, Inc	
Subtotal Remaining Funds	\$3,899,895.55
Total Estimated Engineering Fees	(\$620,000.00)
Subtotal Remaining Funds	\$3,279,895.55
Cost of Cap Construction	
Total Payments to Date to R. Bates & Sons, Inc. (Ba	ates)(\$2,679,744.33)
Current Amount of Retainage Held	(\$54,688.66)
Subtotal Remaining Funds	\$545,462.56
Administrative Costs (As of July 12, 2005)	
Legal	(\$125,575.00)
Clerk of the Works	(\$165,377.00)
Miscellaneous	(\$74,406.00)
Total Remaining Funds	\$180,104.56

Andrew Bisignani February 28, 2007 Page 2

Please note that that the above table uses data obtained from the Town as of July 12, 2005 for the Town's legal fees, Clerk of the Works expenses and miscellaneous expenses. Using this data, the Town should have enough funds to conduct a portion of the 30-year Post-Closure Monitoring and Maintenance Program. Once this funding has been exhausted, the Town will need to appropriate funds each year thereafter, for post-closure monitoring and maintenance.

Please contact me at (617) 452-6648 if you have any questions or would like to discuss this further.

cc: J. Attubato, Saugus E. Nazaretian, CDM CDM File Attachment 6
Trend of Cost Estimates

Town of Saugus

Landfill Audit Trend of Cost Estimation

					CD&M Cost	Estimation			
	_	Original	Revised	Revised	Revised	Revised	Revised	Revised per Letter	Revised per Letter
Items		Projection	Feb, 2004	May 8, 2004	Sept 13, 2004	March 7, 2005	July 12, 2005	Sept 05	Feb 07
Mass Highway Depart	tment								
Phase I revenue		3,086,500	3,063,509	3,122,500	3,122,500	3,122,500	3,122,500		
Phase II revenue	_	3,465,500	3,531,600	3,465,500	3,465,500	3,479,399	3,479,399		
	Total Revenues	6,552,000	6,595,109	6,588,000	6,588,000	6,601,899	6,601,899	6,753,904	6,753,904
T. Ford Company:									
Phase I site prep & da	aily operations	(1,403,400)	(1,426,272)	(1,458,791)	(1,458,791)	(1,458,791)	(1,458,791)		
Phase II site prep & d	aily operations	(703,650)	(734,400)	(734,400)	(762,050)	(684,652)	(684,652)		
Phase IIA site prep &		(385,840)	(559,250)	(559,250)	(578,300)	(571,403)	(571,403)		
	Subtotal T Ford	(2,492,890)	(2,719,922)	(2,752,441)	(2,799,141)	(2,714,846)	(2,714,846)	(2,869,941)	(2,854,008)
Administrative Costs:									
Legal		-		_	(148,674)	(124,845)	(125,575)	(125,575)	(125,575)
Clerk of the Works				-	(125,000)	(150,405)	(165,377)		(165,377)
Miscellaneous		-	-	-	(56,408)	(56,408)	(74,406)		(74,406)
Permitting and engine	eering costs	-	-	-	(260,000)	(260,000)	(260,000)	-	- 1
	Subtotal Admin	-	-	-	(590,082)	(591,658)	(625,358)	(365,358)	(365,358)
CD&M:									
Engineering		(364,000)	(439,000)	(439,000)	(360,000)	(360,000)	(360,000)		
S	Subtotal Engineering	(364,000)	(439,000)	(439,000)	(360,000)	(360,000)	(360,000)	(620,000)	(620,000)
R Bates (Cap Constru	uction):	(2,323,500)	(2,310,277)	(2,310,277)					
Cap 16.5 acres @ \$1	00k per acre		-		(1,650,000)	(1,650,000)	(2,496,111)	(2,495,427)	
Contingency					(165,000)	(165,000)	(34,799)	(32,394)	
Parking lot area			-		(500,000)	(500,000)	(370,785)	(370,785)	
	Subtotal R Bates	(2,323,500)	(2,310,277)	(2,310,277)	(2,315,000)	(2,315,000)	(2,901,695)	(2,898,606)	(2,734,433)
1	Total Expenditures	(5,180,390)	(5,469,199)	(5,501,718)	(6,064,223)	(5,981,504)	(6,601,899)	(6,753,905)	(6,573,799)
Surplus / (Deficit) Af	ter Capping	1,371,610	1,125,910	1,086,282	523,777	620,395	-	(1)	180,105

Attachment 7
Budget to Actual Report

Town of Saugus Landfill Audit Trend of Cost Estimation

		CD&M Cos	Actual		
∍ms		Original Projection	Revised per Letter Feb 07	Per Town 6/30/2008	
ass Highway Dep	partment	-			
Phase I revenue		\$3,086,500			
hase II revenue		\$3,465,500			
_	Total Revenues	\$6,552,000	\$6,753,904	\$6,698,007	
T Ford Company:					
nase I site prep &	daily operations	(\$1,403,400)			
mase II site prep 8		(\$703,650)			
Phase IIA site prep		(\$385,840)			
	Subtotal T Ford	(\$2,492,890)	(\$2,854,008)	(\$2,854,008)	
Administrative Cos	ts:				
' egal		\$0	(\$125,575)	(\$187,970)	
lerk of the Works		\$0	(\$165,377)	(\$212,796)	
wiscellaneous		\$0	(\$74,406)	(\$25,522)	
Permitting and eng	ineering costs	\$0	\$0	\$0	
	Subtotal Admin	\$0	(\$365,358)	(\$426,288)	
CD&M:					
ngineering		(\$364,000)			
riginicating	Subtotal Engineering	(\$364,000)	(\$620,000)	(\$638,184)	
_		(+/	(+)	(+,,	
R Bates (Cap Cons	· · · · · · · · · · · · · · · · · · ·	(\$2,323,500)			
ap 16.5 acres @ 3	\$100k per acre				
ontingency					
Parking lot area	Cultatal D Datas	(\$0.202.500)	(CO 704 400)	(0.704.400)	
	Subtotal R Bates	(\$2,323,500)	(\$2,734,433)	(\$2,734,433)	
	Total Expenditures	(\$5,180,390)	(\$6,573,799)	(\$6,652,912)	
surplus / (Deficit)	After Capping	\$1,371,610	\$180,105	\$45,095	

Includes some post closure monitoring in fiscal 2008

Attachment 8
Revenue Analysis

Town of Saugus Landfill Closure Project Revenue Per Agreements vs. Actual Revenue

Mass Highway: Revenue Breakdown

[Р	er Agreement				Per Actual To	onna	ge*		Variance
Type of Fee	Unit Price	Tonnage	Amount	Uni	t Price	Tonnage		Amount		Amount
Tipping fee - site	\$ 6.30	280,000	\$ 1,764,000	\$	6.30	254,172	\$	1,601,284		\$ (162,716)
Tipping fee - Subaru Pier	\$ 3.85	50,000	\$ 192,500	\$	3.85	74,078	\$	285,200		\$ 92,700
Operations fee			\$ 780,000				\$	780,000		\$ -
Mobilization fee			\$ 350,000				\$	350,000		\$ -
Total Phase I			\$ 3,086,500				\$	3,016,484		\$ (70,016)
Type of Fee	Unit Price	Tonnage	Amount	Uni	t Price	Tonnage		Amount		
Tipping fee - site	\$ 6.65	320,000	\$ 2,128,000	\$	6.65	345,968	\$	2,300,687		\$ 172,687
Tipping fee - Subaru Pier	\$ 4.25	50,000	\$ 212,500	\$	4.25	25,922	\$	110,169		\$ (102,332)
Operations fee			\$ 1,125,000				\$	1,125,000		\$ -
Total Phase II	-		\$ 3,465,500				\$	3,535,856		\$ 70,356
Rejected material	\$ 3.50	-	\$ -	\$	3.50	14,406	\$	50,421	**	\$ 50,421
Tier II testing fees			\$ -				\$	36,645	**	\$ 36,645
Other additional fees			\$ -				\$	64,243	**	\$ 64,243
Total Additional Fees			-					151,309		\$ 151,309
	Grand total	for the project	\$6,552,000					\$6,703,649		\$151,648.60

Analysis of Contract:

Amendment#	Date	Amount
1	12/3/2003	\$3,465,500
	Total Amendment:	\$3,465,500
	Original Contract:	\$3,086,500
Total Aut	horized Amount:	\$6,552,000
Total R	leceived per G/L:	\$6,698,007
Total	Actual Tonnage:	\$6,703,649
	Variance:	(\$5,642)

^{*:} actual tonnage is based on the daily total tracked by the Engineer

**: rejected tonnage is based on cumulative total from the payment requisition dated April 28, 2005 which is the lastest possible payment requisition

Attachment 9

T. Ford & Company Contract Analysis Town of Saugus Landfill Project - T Ford Company Inc. Contract Analysis

T Ford Company: Site Preparation and Daily Operations

<u>c</u>		Date	Signed?	Amount	Description
	1	6/6/2003	Υ	\$900	Change of stuck loads during the 1st week.
	1.1	4/21/2004	Y	\$3,285	Change of stuck loads during the 1st week.
	2	6/30/2003	Y	\$15,675	Additional cleaning requested by DPW.
	2.1	4/21/2004	Y	\$15,675	Additional cleaning requested by DPW.
	2.2	9/9/2004	Y		Additional cleaning requested by DPW.
	2.3	9/27/2004	Y	\$15,675	Additional cleaning requested by DPW.
	3.1	8/12/2003	Y	\$11,550	Special handling of unacceptable materials.
	3.2	8/25/2003	Y	\$12,086	Special handling of unacceptable materials.
	3.3	11/26/2003	Y	\$2,979	The first of the control of the cont
	3.4	5/24/2004	Y	\$8,327	Special handling of unacceptable materials.
	3.5	9/27/2004	Y	\$1,470	Special handling of unacceptable materials.
	3.6	10/19/2004	Y	\$1,462	Special handling of unacceptable materials.
	3.7	2/19/2005	Y	\$12,154	Special handling of unacceptable materials.
	4	8/12/2003	Y	\$13,314	Excavation requested by Engineer.
	5	11/10/2003	Y	\$2,144	Relocation requested by DPW.
	6	11/26/2003	Y	\$13,222	Change of basin design to include additional liner system.
	7	1/22/2004	Y	\$1,329,725	Amend contract to include Phase II.
	8	3/16/2004	Y	\$18,194	Additional work related to pretested material.
	9	8/2/2005	Y	\$12,153	Additional expense related to unacceptable material.
	10	10/17/2005	Y	(\$15,933)	Services not performed by the contractor.
	Total C	hange Order:	-	\$1,479,282	-
	Orig	inal Contract:		\$1,422,400	
Total	Authori	zed Amount:		\$2,901,682	
	Total I	Paid per G/L:		\$2,854,008	-
		Variance:		\$47,674	

Attachment 10

Engineering Contract Analysis

Town of Saugus Landfill Project - CD&M Contract Testing

CD&M: Engineering

	Date	Signed?	Description
1/21/2003 12/9/2004 8/10/2005	Y Y Y	\$393,000 \$78,000 \$69,000	1 Specify prices for multiple tasks 2 Add Phase II administrative costs 3 Specify prices for multiple tasks
	ange Order: nal Contract: zed Amount:	\$540,000 \$80,000 \$620,000	

Task	Service Type	Total Contracted Max Amount	
Complete Determination Process with DEP	Basic	\$3,000	1
Develop Bid Documents for Construction Contract No. 1	Basic	\$12,000	1
Bidding Services for Construction Contract No. 1	Basic	\$8,000	1
Resident Services for Construction No. 1	Basic	\$50,000	1
General Services for Construction No. 1	Basic	\$40,000	1
Permitting	Special	\$40,000	1
Development of Baseline information	Special	\$20,000	1
Assistance with CAT & DEP negotiations	Special	\$5,000	1
Preparation of CAD	Special	\$60,000	1
ENF	Special	\$10,000	1
NOI with Conservation Commission	Special	\$12,000	1
	Total Before Capping	\$260,000	
Preparation of Certification Report Closure	Special	\$3,700	2
Develop Bid Documents for Construction Contract No. 2	Basic	\$15,000	2
Bidding Services for Construction Contract No. 2	Basic	\$10,000	2
Resident Services for Construction No. 2	Basic	\$57,800	2
General Services for Construction No. 2	Basic	\$7,500	2
Public Meetings	Special	\$5,000	
Stormwater Pollution Prevention Plan	Special	\$7,000	1
Materials Management Plan	Special	\$8,000	1
Preparation of Conceptual Closure and Post Closure Plan	Special	\$15,000	
Preparation of CSA Report	Special	\$150,000	
Preparation of CAAA	Special	\$0	
Preparation of Certification Report	Special	\$8,000	
Meetings (General Consulting)	Special	\$20,000	
Construction Administration Phase II	Special	\$78,000	
Payment made by Massachusetts Highway Department		-\$25,000	1
	Total	\$620,000	
Paid through June 30, 2008		\$638,184	
	Variance	-\$18,184	

Attachment 11

R. Bates & Sons, Inc. Contract Analysis Town of Saugus Landfill Project - R. Bates & Sons, Inc. Contract Testing

R Bates & Sons: Landfill Closure Construction

#	Date	Amount	Description
1		\$296,870	DPW parking lot - to replace Alternate#1 in the original contract.
	Total Change Order: Original Contract:	\$296,870 \$2,496,112	
	Total Authorized Amount:	\$2,792,982	
	Total Paid per G/L:	\$2,734,433	
	Variance:	\$58,549	1 1